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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/782,988	02/13/2001	Hitoshi Sekine	49986-0505	1948

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EXAMINER

EHICHIOYA, FRED I

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 04/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

09/782,988

Applicant(s)

SEKINE ET AL.

Examiner

Fred I. Ehichioya

Art Unit

2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 - 4, 6 - 14, 16 - 24, and 26 - 31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 4, 6 - 14, 16 - 24, and 26 - 31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, with respect to claims 1 – 4, 6 – 14, 16 – 24, and 26 – 31 filed January 20, 2004 have been fully considered but they are not persuasive for the following reasons.

Applicants argue:

(a) Moon does not teach or suggest a data storage apparatus with data processor configured to "process a search query against the digital data stored on the WORM storage device" Page 3, Para 2).

(b) "There is no teaching or suggestion in Moon of doing this in the context of a WORM device" (Page 4, Para 1).

Examiner respectfully disagrees with all of the allegations as argued. Examiner, in his previous office action, gave detail explanation of claimed limitation and pointed out exact locations in the cited prior art.

In response to Applicants' argument (a): Examiner respectfully disagrees with the applicant. This rejection is 35 USC 103 rejections and that the applicant is attacking each reference individually. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091,

231 USPQ 375 (Fed. Cir. 1986). Applicant only argues Moon's reference. Ramsay teaches storage of digital data on WORM in column 30, lines 22 – 24, Ramsay also discloses data processor configuration in column 27, lines 40 - 67 and Moon discloses searching of digital data on optical disks in column 16, lines 20 – 38. Examiner maintains that combination of Ramsay's teaching and Moon's teachings clearly suggest applicant's claimed invention.

In response to Applicants' argument (b): Examiner respectfully disagrees with the applicants. Moon teaches processing search query against digital data stored on optical disks. According to Microsoft Computer Dictionary, Fifth Edition WORM is defined as "a type of optical disc that can be read and reread but cannot be altered after it has be recorded." This clearly shows that Moon teaches, "Process a search query against the digital data stored" on the context of WORM storage device.

2. In view of the above, the examiner contends that all limitations as recited in the claims have been addressed in this Action. For the above reasons, Examiner believed that rejection of the last Office action was proper.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1 – 3, 8 – 13, 18 – 23, 28 - 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,502,576 issued to Ramsay, Thomas E. et al. (hereinafter “Ramsay”) in view of U.S. Patent 6,408,338 issued to Moon Seong-jin et al (hereinafter “Moon”).

Regarding claims 1, 12 and 22, Ramsay teaches a data storage apparatus comprising:

an interface configured to receive digital data (see column 19, lines 64 – 67);  
and a data processor communicatively coupled to the interface and being configured (see column 27, lines 40 – 43 and lines 64 – 67) to:

automatically receive digital data from the interface and cause the digital data to be stored to a write-once-read-many (WORM) storage device (see column 6, lines 27 – 30, column 30, lines 22 - 24 and column 31, lines 24 – 33),

Ramsay does not explicitly teach process a search query against the digital data stored on the WORM storage device, and in response to processing the search query against the digital data stored on the WORM storage device, generate data that identifies data stored on the WORM storage device that satisfies the search query.

However, Moon teaches process a search query against the digital data stored on the WORM storage device (see column 1, lines 17 – 23, “searching of digital data”), and

in response to processing the search query against the digital data stored on the WORM storage device, generate data that identifies data stored on the WORM storage device that satisfies the search query (“generating basic unit information related to each of the basic units of the data stream, and generating stream information including a plurality of the basic unit information, each of the basic unit information of the basic unit having arrival time information of a first packet of data of a corresponding basic unit”, see column 3, lines 60 - 65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Moon with the teaching of Ramsay wherein the digital data are stored on the WORM. Generated stream of data identify the first packet of data by the arrival time. The motivation is that digital data stored on the WORM could be searched, playback and could be used in digital satellites and digital cable broadcasting.

Regarding claim 2, Ramsay teaches a WORM storage device (see column 30, lines 22 – 24).

Regarding claims 3, 13 and 23, Kern teaches the data processor is further configured to generate one or more indexes for data stored to the WORM storage device (see column 22, lines 18 – 23 and column 30, lines 58 – 59).

Regarding claims 8, 18 and 28, Ramsay teaches the digital data includes facsimile data (see column 21, lines 44 – 45).

Regarding claims 9, 19 and 29, Ramsay teaches the digital data includes electronic document data (see column 29, line 53).

Regarding claims 10, 20 and 30, Ramsay teaches the digital data includes printer data (see column 25, lines 39 – 44).

Regarding claims 11, 21 and 31, Ramsay teaches the data is stored on an WORM optical medium (see column 30, lines 22 – 24), and

the data processor is further configured to cause a label to be applied to the WORM optical medium, wherein the label specifies one or more attributes of the data (see column 14, line 64; column 30, lines 23 –24 and lines 58 – 62).

5. Claims 4, 6, 7, 14, 16, 17, 24, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramsay in view of Moon and further in view U.S. Patent 6,202,124 issued to Kern Robert Frederick (hereinafter “Kern”).

Regarding claims 4, 14 and 24, Ramsay or Moon does not explicitly teach “meta data”.

Kern teaches the data processor is further configured to generate meta data that describes one or more attributes of the data stored to the WORM storage device (see column 3, lines 20 – 23 and column 7, lines 1 – 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching Kern with the teaching of Ramsay and Moon wherein processor is further configured to generate Meta data that describes one or more attributes of the data stored to the WORM. The motivation is that the Meta data contain definitions and versions of the digital data stored on the WORM.



Regarding claims 6, 16 and 26, Kern teaches the data processor is further configured to process the search query against one or more indexes generated by the data processor (see column 6, lines 48 – 52).

Regarding claims 7, 17 and 27, Kern teaches the data processor is further configured to automatically process the search query according to a set of one or more time criteria (see column 6, lines 48 – 56 and column 8, lines 16 - 20).

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

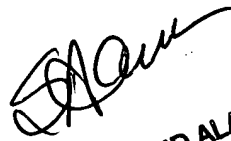
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred I. Ehichioya whose telephone number is 703-305-8039. The examiner can normally be reached on M - F 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on 703-305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fred I. Ehichioya  
Examiner  
Art Unit 2172  
March 24, 2004

  
SHAHID ALAM  
PRIMARY EXAMINER